ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

Sept. 1903

STATION NUMBERS

Numbers 7496 to 7545

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7496

Date, March 12, 1903

Time of day, 9:55 A. M.; of tide, ½ ebb

Locality, Hawk Channel, Fla

Exact position, ¾ mi. E. x N. of the Northern most of the Ragged Keys

Depth, 13 ft.

Nature of bottom, Hard sand

Dredging instrument used, Small scrape dredge

Direction of drift, East ; distance, ⅛ mi.

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.02479 temp., 23

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 3002

State of sky, Partly cloudy

Direction of wind, E. N. E. ; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U. S. N

Name and position of observer, Vernon E. West.

NOTES RELATING TO STATION NO. 7426

1 tum fish.
1 small fish
1 shell

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7497

Date, March 12, 1903

Time of day, 10:30 A. M. of tide, ½ ebb.

Locality, Soldier Key Lake, Fla.

Exact position, 2¼ mi. S. W. ¾ W. of Soldier Key.

Depth, 9 ft.

Nature of bottom, Soft sand & grass.

Dredging instrument used, Small scrape dredge

Direction of drift, N. N. E. ; distance, ⅛ mi.

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0250 temp., 22.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 3002

State of sky, Partly clear.

Direction of wind, E. N. E. ; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U. S. N.

Name and position of observer,

Vernon L. Kellogg.

NOTES RELATING TO STATION NO. 7497

3 small shells

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 2788

Date, March 12, 1903

Time of day, 11:00 A. M.; of tide, ½ ebb

Locality, Soldier Key Lake, Fla.

Exact position, 1¾ mi. N. ¾ W. of Soldier Key.

Depth, 9 ft

Nature of bottom, Soft sand.

Dredging instrument used, Small scrape dredge

Direction of drift, E. S. E.; distance, ⅛ mi.

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0240 temp., 23

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 3002

State of sky, Cloudy

Direction of wind, E. N. E.; force, 4.

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U. S. N.

Name and position of observer,

Vernon E. West.

NOTES RELATING TO STATION NO. 2728

1 fish
2 small shells

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7499

Date, March 12, 1903

Time of day, 1:40 P. M.; of tide, Low Water

Locality, Biscayne Bay, Fla.

Exact position, 1 7/8 mi. E. N. E. ½ E. of Strad Point.

Depth, 10 fF.

Nature of bottom, Hard sand.

Dredging instrument used, Small scrape dredge

Direction of drift, West ; distance, ½6 mi.

Temperature of air, 73 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1 0156 temp., 23.5°

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7049

Barometer reading, 30.00

State of sky, Partly Cloudy

Direction of wind, E. N. E. ; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk.

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U. S. N.

Name and position of observer,

Vernon E. West.

NOTES RELATING TO STATION NO. 2722

1 small crab.

643

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7500

Date, March 12, 1903

Time of day, 2:00 P. M.; of tide, Low Water.

Locality, Biscayne Bay, Fla.

Exact position, 2 mi. S. S. E. ¾ E. of Shoal Point

Depth, 10 ft.

Nature of bottom, Rock

Dredging instrument used, Small scrape dredge

Direction of drift, West ; distance, ½ mi.

Temperature of air, 73 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0195 temp., 22.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7049

Barometer reading, 2998

State of sky, Partly clear.

Direction of wind, E. N. E ; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U. S. N.

Name and position of observer,

Vernon E. West.

NOTES RELATING TO STATION NO. 2[illegible]

I small finger sponge

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7561

Date, March 12, 1903

Time of day, 2:30 P.M.; of tide, Low Water

Locality, Pascagoula Bay, Miss.

Exact position, 5/8 mi. S. of S. Point of Middle Ledge

Depth, 8 ft

Nature of bottom, soft sand

Dredging instrument used, Small scrape dredge

Direction of drift, West; distance, 1/4 mi.

Temperature of air, 73 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0222 temp., 23

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 29.84

State of sky, Partly clear.

Direction of wind, E.N.E.; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U.S.N.

Name and position of observer, Vernon L. West

NOTES RELATING TO STATION NO. 2 Nov

Nothing on card

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 2502

Date.

Time of day, 1:00 P. M.; of tide.

Locality, Hawk Channel, Fla.

Exact position, Hen & Chickens Light bears N. E. W. distance 3 mi.

Depth, 14 ft.

Nature of bottom, Hard.

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, 61 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0234 temp., 22

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7454

Barometer reading, 30.16

State of sky, Partly Cloudy.

Direction of wind, N. N. E.; force, 5

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, [illegible]

Lieutenant, U. S. N.

Name and position of observer,

Vernon L. West.

NOTES RELATING TO STATION NO. 2

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 2103

Date.

Time of day, 1:30 P. M. of tide.

Locality, Hawk Channel, Fla

Exact position, Ken + Chickens Light bears W. by S. distance ½ mi.

Depth, 16 ft

Nature of bottom, Hard.

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, 61 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0236 temp., 22

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 2450

Barometer reading, 30.16

State of sky, Partly cloudy

Direction of wind, N. N. E.; force, 5

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain, U. S. N.

Name and position of observer,

Vernon E. West

NOTES RELATING TO STATION NO.

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7554

Date,

Time of day, 7:00 A.M.; of tide.

Locality, Hawk Channel, Fla.

Exact position, Key + Chickens Light

bears South Western 2 m.

Depth, 15 ft.

Nature of bottom, Hard, rocky

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0237 temp., 24.5°

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 2450

Barometer reading, 3002

State of sky, Partly cloudy

Direction of wind, E.N.E. ; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James E. Smith

Lieutenant, U.S.N.

Name and position of observer,

Vernon L. Kellogg

NOTES RELATING TO STATION NO.

643

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7305

Date,

Time of day, 8:30 A M.; of tide.

Locality, Hawks Channel, Fla.

Exact position, Near Channel Light

bears S. S W. distance 2½ mi.

Depth, 14 ft

Nature of bottom, Hard sand

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0237 temp., 24.5°

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7454

Barometer reading, 3002

State of sky, Partly cloudy

Direction of wind, E. N. E.; force, 1.

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatswain, U. S. N.

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO. _____

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7506

Date,

Time of day, 8:00 A M; of tide,

Locality, Hawk Channel, Fla.

Exact position, East end of Triumvirate Key bears S.W. & W. distance 1/4 mi.

Depth, 10 ft.

Nature of bottom, Hard

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, 70 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0246 temp., 21

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 29.97

State of sky, Partly cloudy

Direction of wind, E. N. E. ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James C. Smith

Lt Steamer U. S. N.

Name and position of observer,

Vernon L. West.

NOTES RELATING TO STATION NO.

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7507

Date.

Time of day, 8:30 A M; of tide,

Locality, Hawk Channel, Fla.

Exact position, above Buy beacon N 15 W.

distance 1 1/4 mi.

Depth, 11 ft.

Nature of bottom, Hard.

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, 70 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0246 temp., 21

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 29.97

State of sky, Partly Cloudy

Direction of wind, E. N° E. ; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Lyon

Boatswain, U. S. N.

Name and position of observer,

Warren C. Kent

NOTES RELATING TO STATION NO.

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 2570

Date,

Time of day. 1:00 P. M.; of tide,

Locality. Hawk Channel, Fla.

Exact position. Anglefish Key Shoal ground,

Depth, 11 fF

Nature of bottom. Hard sand.

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air. 76 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, "

Density at surface, 1.0238 temp., 22

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 2456

Barometer reading. 30.02

State of sky, Cloudy

Direction of wind, East ; force, 6

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatswain, U. S. N.

Name and position of observer,

Vernon L. Kellogg

NOTES RELATING TO STATION NO.

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7509

Date,

Time of day, 1:30 P. M.; of tide,

Locality, Haiti Channel Fla

Exact position, Angel Fish Key Stragonal

Old Wreck Wreck House bears N.E. by E. dist 1¼ mi

Depth, 12 ft.

Nature of bottom, Hard.

Dredging instrument used,

Direction of drift, ; distance?

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0235 temp., 22

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 3002

State of sky, Cloudy

Direction of wind, East ; force, 6

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Lieutenant, U. S. N.

Name and position of observer,

Vernon L. Kellogg

NOTES RELATING TO STATION NO.

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 2710

Date,

Time of day, 8:00 A. M.; of tide,

Locality, Bank Channel Fla.

Exact position, Old Rhodes Key Sponge Grounds
Old Rhodes Bank Bearing Mean A.T. E. 1/2 Mile

Depth, 10 fF.

Nature of bottom, Hard.

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, 75° therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0240 temp., 22

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 2998

State of sky, Partly Cloudy.

Direction of wind, S. E. ; force, 5

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain, U. S. N.

Name and position of observer,
Vernon L. West.

NOTES RELATING TO STATION NO.

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 2511

Date, March 25, 1923

Time of day, 9:10 A. M.; of tide.

Locality, Gulf Stream off Cape Hatteras

Exact position, 2½ S. S. E. of Diamond Shoals Light.

Depth, 45 fathoms

Nature of bottom, rocky

Dredging instrument used, Tyson dredge

Direction of drift, North; distance, ½ mile.

Temperature of air, 77 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 70 "

Density at surface, 1.0239 temp., 24.4°

" at depth of fathoms, "

" at bottom, 1.0253 "

Number of salinometer, 7750

Barometer reading, 2996

State of sky, Cloudy

Direction of wind, S. W.; force, 2

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, J. [illegible]

Boatswain, U. S. N.

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO. 2172

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 2512

Date, March 25, 1882

Time of day, 11:15 a.m.; of tide.

Locality, Gulf Stream off Cape Florida

Exact position, 3 mi. S. E. ½ E. of

Fowey Rocks Lt.

Depth, 171 fathoms

Nature of bottom, soft

Dredging instrument used, 7 ft. beam trawl

Direction of drift, N. ½ E. ; distance, 1¼

Temperature of air, 77 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 57 "

Density at surface, 1.0236 temp., 25.5

" at depth of fathoms, "

" at bottom, 1.0247 "

Number of salinometer, 7851

Barometer reading, 29.82

State of sky, Cloudy

Direction of wind, N. W. ; force, 2.

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Commr. H. F.

Bartlett U.S.N.

Name and position of observer,

Vernon L. Kellogg

NOTES RELATING TO STATION NO. [illegible]

Mussels

Two species of unio - large ones

2 catfish

Sunfish - spp.

3 sp. minnows

Water snakes

Green frog

Painted turtle

Several muskrat signs

Empty [illegible] shells

Dead [illegible]

Two beavers on large creek

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 2513

Date, March 25, 1903

Time of day, 11.50 a M. of tide.

Locality, Gulf Stream S. Cape Florida, Fla.

Exact position, 1/2 mi. E. S. E. ½ E.

Fowey Rocks Light

Depth, 207 fathoms.

Nature of bottom, Grey mud.

Dredging instrument used, [illegible]

Direction of drift, [illegible] ; distance, 1½ mi.

Temperature of air, 78 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, 76 "

Density at surface, 1.0236 temp.,

" at depth of fathoms, "

" at bottom, 1.0277 "

Number of salinometer, 7209

Barometer reading, 29.27

State of sky, Cloudy

Direction of wind, S W. ; force, 2

Rain, Moderate

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James E [illegible]

Boatswain

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO. [illegible]

[illegible]

[illegible] of fish

[illegible] of [illegible]

[illegible]

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7517

Date, March 25, 1913

Time of day, 12:45 P. M.; of tide,

Locality, Gulf stream off Cape Florida, Fla.

Exact position, 6 mi. E. of Fowey Rocks light.

Depth, 207 fathoms

Nature of bottom, Grey mud.

Dredging instrument used, 7ft Steam Trawl

Direction of drift, N. by E. ; distance, 1/2 mile.

Temperature of air, 72 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 42 "

Density at surface, 1.0235 temp., 72.5

" at depth of fathoms, "

" at bottom, 1.0273 "

Number of salinometer, 7459

Barometer reading, 29.87

State of sky, Clear

Direction of wind, S. W. ; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lieut. C. H. Smith, U. S. N.

Name and position of observer,

Vernon E. Wait

NOTES RELATING TO STATION NO. [illegible]

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7515

Date, March 30 1905

Time of day, [illegible] ; of tide,

Locality, [illegible]

Exact position, [illegible]

Depth, [illegible]

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] ; distance, [illegible]

Temperature of air, [illegible] therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 49 "

Density at surface, 1.0236 temp., [illegible]

" at depth of fathoms, "

" at bottom, 1.0248 "

Number of salinometer, [illegible]

Barometer reading, 29.91

State of sky, Clear

Direction of wind, [illegible] ; force, 5

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

[illegible], U. S. N.

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO. 7072

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7516

Date, March 30th 19

Time of day, 10 AM 6 PM; of tide,

Locality, East Brant Rock Range Q

Exact position, 1 Mile S 1/4 W of Fort Point Light

Depth, 50 fathoms

Nature of bottom, Fine gray sand & shell

Dredging instrument used, Oyster dredge

Direction of drift, North ; distance, 3/8 Mile

Temperature of air, 73 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 69 "

Density at surface, 1.024 temp., 45° C

" at depth of fathoms, "

" at bottom, Instrument broken

Number of salinometer.

Barometer reading, 29.80

State of sky, Clear

Direction of wind, West ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, U.S. Commission

Name and rank of commanding officer, Lieut. [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO. 2516

2 v Small crab
Quantity of coral
1 Small Fish
2 Worms (Hairy)
1 Small Eel
Several Small Star Fish
Worm Tubes
1 Shrimp

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7517

Date, March 20th 1903

Time of day, 11:30 a.m. of tide,

Locality, Gulf Stream off Cape Fear

Exact position, 2½ miles S.S.E. of Frying Pan Shoals Light

Depth, 38 fathoms

Nature of bottom, fine gray sand & shells

Dredging instrument used, Sigsbee dredge

Direction of drift, North ; distance, 5½ miles

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 74 "

Density at surface, 1.0254 temp., 75.0°

" at depth of fathoms, "

" at bottom, Instrument broken

Number of salinometer, 456

Barometer reading, 29.82

State of sky, Clear

Direction of wind, West ; force, 13

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Albatross

Service to which attached, Coast Survey

Name and rank of commanding officer, [illegible]

Name and position of observer,

NOTES RELATING TO STATION NO. 1167

2 Express of roads
Grand Lake
Ends
1 Abstract
2 Postal Stores

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7518

Date, March 30th 1883

Time of day, 12:45 P.M. of tide,

Locality, Entrance of Cape Fear River

Exact position, 4 miles N.N.E. ½ E. of Frying Pan Shoals Light

Depth, 156 fathoms

Nature of bottom, Fine sand & shells

Dredging instrument used, Hydrometer Tube

Direction of drift, [illegible] ; distance, [illegible]

Temperature of air, 75 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 48 "

Density at surface, 1.0224 temp., 75.5

" at depth of fathoms, "

" at bottom, Instrument broken

Number of salinometer, 7455

Barometer reading, 29.81

State of sky, Clear

Direction of wind, West ; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, U.S. Steamer Fish Commission

Service to which attached, Fish Commission

Name and rank of commanding officer, [illegible]

Name and position of observer, Wm. H. Brooks
Asst.

NOTES RELATING TO STATION NO. 7017

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, March 20 1905

Time of day, 1:35 PM of tide,

Locality, [illegible]

Exact position, 5¼ miles E.N.E. ½ E. from Fowey Rocks Light

Depth, 136 fms

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, South ; distance, ½ mile

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, 48 "

Density at surface, 1.0244 temp., 76 deg C

" at depth of fathoms, "

" at bottom, 1.0244 " 76

Number of salinometer,

Barometer reading, 29.60

State of sky, Clear

Direction of wind, [illegible] ; force, 3

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 75 a

Date, March 26th 1883

Time of day, 2½ P.M. ; of tide,

Locality, Gulf Stream off Cape Florida

Exact position, 7½ miles N.E. x E. of Carysfort Reef light

Depth, 15 fathoms

Nature of bottom, fine sand

Dredging instrument used, Tilton Trawl

Direction of drift, North ; distance, 1½ miles

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 47 "

Density at surface, 1.025 temp., 75 cor

" at depth of fathoms, "

" at bottom, 1.025 " 70 cor

Number of salinometer,

Barometer reading, 29.79

State of sky, Clear

Direction of wind, East ; force, 5

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel,

Service to which attached, Fish Commission

Name and rank of commanding officer, Bowers

Lieut. A. Swift U.S.N.

Name and position of observer,

NOTES RELATING TO STATION NO.

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7521

Date, July 28, 1903

Time of day, 1.30 P.M.; of tide, 3/4 flood

Locality, Vineyard Sound, Mass.

Exact position, Nobska Point bears

N. E. x N. ½ mi.

Depth, 7½ fathoms

Nature of bottom, Coarse sand

Dredging instrument used, Rake dredge

Direction of drift, N.E. x N.; distance, ⅛ mi.

Temperature of air, 62 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 67 " Casella

Density at surface, 1.0230 temp., 19

" at depth of fathoms, "

" at bottom, 1.0225 "

Number of salinometer, 7415-0

Barometer reading, 2990

State of sky, Cloudy

Direction of wind, S.W. : force, 4

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Scott

Boatswain, U. S. N.

Name and position of observer,

Tarleton E. Hoek

NOTES RELATING TO STATION NO. 2527

Orly and Stella.
Nectria Subdiaemon
area
Transversa

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 2532

Date, July 23, 1923

Time of day, 2.15 P.M.; of tide, High Water

Locality, Vineyard Sound, Mass.

Exact position, Robbins Light bears N ½ W. dist 1 mi.

Depth, 10 fathoms

Nature of bottom, Rocky

Dredging instrument used, Rake dredge

Direction of drift, S. x W. ; distance, ⅛ mi.

Temperature of air, 62 Centigrade therm. No.,

" of surface water, " "

" at depth of fathoms, "

" at bottom, 65° "

Density at surface, 1.0226 temp., 18.5°

" at depth of fathoms, "

" at bottom, 1.0230 "

Number of salinometer, 7450

Barometer reading, 2990

State of sky, Cloudy

Direction of wind, S. W. ; force, 7

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, J. R. [illegible]
Boatswain, U. S. N.

Name and position of observer,
Vernon E. West

NOTES RELATING TO STATION NO. 7562

Many Clione Antillarum
Many Arbacia Punctulata
Hybrinides
Several Eupagurus
Several Species of Shells

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7523

Date, July 28, 1903

Time of day, 2 30 P.M.; of tide, High Water

Locality, Vineyard Sound, Mass.

Exact position, Robbins Point bears N.N.W. dist 1 5/8 mi.

Depth, 13 fathoms

Nature of bottom, Rocky

Dredging instrument used, Rake Dredge

Direction of drift, S.S.W. ; distance, 1/8 mi.

Temperature of air, 62 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 65 "

Density at surface, 1.0230 temp., 18

" at depth of fathoms, "

" at bottom, 1.0232 " 18

Number of salinometer, 7450

Barometer reading, 2990

State of sky, Cloudy

Direction of wind, S.W. ; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U.S.N.

Name and position of observer, Jesse E. West

NOTES RELATING TO STATION NO. 2323

Little Living Rockweed mostly
Sea Weeding (Ascophyllum)

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7524

Date, July 23 1913

Time of day, 2.40 P.M.; of tide, ½ ebb.

Locality, Vineyard Sound, Mass.

Exact position, Nobska Light bears N. N. W. ½ W. dist. 2½ mi.

Depth, 10 fathoms

Nature of bottom. rocky

Dredging instrument used, Tilt Rem Sweep.

Direction of drift, S. W. ½ S.; distance, ½ mi.

Temperature of air, 62 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 65 " Casino

Density at surface, 1.0230 temp., 18

" at depth of fathoms, "

" at bottom, 1.0230 " 18

Number of salinometer, 7450

Barometer reading. 29.90

State of sky, Cloudy

Direction of wind, S. W.; force, 4

Rain.

Direction of surface current, ; force,

" of bottom " ; force.

Name of vessel. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatswain, U. S. N.

Name and position of observer,

Vernon L. Kellogg.

NOTES RELATING TO STATION NO. 2129

Chiefly dun sediment (Atabapo)
Many Modiolus modiolus
Many Hy dividua
Many Anya Crefidula formicata

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7525

Date. July 25, 1883

Time of day, 6.15 P.M.; of tide, ½ ebb.

Locality, Vineyard Sound, Mass.

Exact position, Watch Light bears N. N. W. ½ W. dist. 2⅝ mi.

Depth, 7 fathoms

Nature of bottom, Sandy

Dredging instrument used, 2 ft. Beam Trawl.

Direction of drift, S. W.; distance, ½ mile.

Temperature of air, 62 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, 64 "

Density at surface, 1.0226 temp., 19

" at depth of fathoms. "

" at bottom. 1.0226 " 18.5

Number of salinometer, 7450

Barometer reading. 29.90

State of sky. Cloudy

Direction of wind, S. W.; force, 4

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Lieutenant U. S. N.

Name and position of observer, Tarleton H. Bean

NOTES RELATING TO STATION NO. [illegible]

Sulphur sponge (Chondrilla) + Anchoricinus Hemidemnum in large quantities

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7526

Date. July 25, 1903

Time of day. 3.40 P.M. of tide, ½ ebb.

Locality. Vineyard Sound, Mass.

Exact position, Robbins Light bears North dist 2½ mi

Depth, 7½ fathoms

Nature of bottom, Sand

Dredging instrument used, 7 ft. Beam Trawl

Direction of drift, S.W. by W.; distance, ½ mi.

Temperature of air, 62 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 63½ "

Density at surface, 1.0226 temp., 18.5

" at depth of fathoms, "

" at bottom, 1.0224 " 18

Number of salinometer, 7450

Barometer reading, 2989

State of sky, Cloudy

Direction of wind, S.W. ; force, 5

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatswain, U. S. N.

Name and position of observer,

Vernon E. Hoffe

NOTES RELATING TO STATION NO. 2526

Chiefly Sulfur Sponge (Chiefly Sulfur)
Worm tubes (Hydroides)
Several stat. fish
Several Cupidula fornicata

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7527

Date, July 31 1903

Time of day, 2 00 P.M.; of tide, ½ flood

Locality, Vineyard Sound, Mass.

Exact position, West Chop town S. E. & ½ E.
Lafayette Cove bears N. x S. ½ E.

Depth, 9 fathoms

Nature of bottom, Sandy

Dredging instrument used, Rake Dredge

Direction of drift, N. E. x E; distance, ⅛ mi

Temperature of air, 72 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, 72 " Casino

Density at surface, 1.0278 temp., 19.5°

" at depth of fathoms, "

" at bottom, 1.0225 " 20

Number of salinometer, 745-0

Barometer reading, 2981

State of sky, Cloudy

Direction of wind, West ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain, U. S. N.

Name and position of observer,

Vernon L. Kellogg,

NOTES RELATING TO STATION NO. 2522

Three species of Pecten
P. fuscus Sowerby
P. ziczac Linné

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7528

Date, July 31, 1903

Time of day, 2 15 P.M.; of tide, ½ flood

Locality, Vineyard Sound, Mass.

Exact position, West Chop bears S.E. ½ E. Robsha Point bears N.E. ¼ E.

Depth, 13 fathoms

Nature of bottom, Sandy

Dredging instrument used, Rake dredge

Direction of drift, N.E. ½ E.; distance, ½ mi.

Temperature of air. 72 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 67½ " Alexis

Density at surface, 1.1225 temp., 19

" at depth of fathoms, "

" at bottom, 1.0225 " 19.5

Number of salinometer, 7450

Barometer reading, 2981

State of sky, Cloudy

Direction of wind, West ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U.S.N.

Name and position of observer, Vernon C. Mast

NOTES RELATING TO STATION NO. 222

Three species of Nereidae
Many kinds of shells
Many stems of Sarcophyton
Not seen recorded for any previous
Arc Harbour P.E. — this region.

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7529

Date, July 31 1903

Time of day, 2.30 P.M. ; of tide, ½ flood

Locality, Vineyard Sound, Mass.

Exact position, Wat Chop Mass E. ½ S. ½ S.

Botaka Point Mass N. E. ½ N. ½ N.

Depth, 13 fathoms

Nature of bottom, Sand & Gravel

Dredging instrument used, Rake Dredge

Direction of drift, N. E. × E. ; distance, ½ M.

Temperature of air, 72 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, 66½ "

Density at surface, 1.0223 temp., 17

" at depth of fathoms, "

" at bottom, 1.0231 " 15

Number of salinometer, 7450

Barometer reading, 2981

State of sky, Cloudy

Direction of wind, West ; force, 3

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatswain, U. S. N.

Name and position of observer,

Vernon C. West

NOTES RELATING TO STATION NO. 2529

R for one reading, moved to
a small number of times which

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7530

Date, July 31 1903

Time of day, 2 00 P.M. : of tide, 3/4 Flood

Locality, Vineyard Sound, Mass

Exact position, Katama Point bears N. x E.
West Chop bears E. 3/4 S.

Depth, 12 fathoms

Nature of bottom, Rocky

Dredging instrument used, Tilt Beam Trawl

Direction of drift, N. E. x E. ; distance, 1/8 mi.

Temperature of air, 82 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 67 "

Density at surface, 1.0226 temp., Celsius 18

" at depth of fathoms, "

" at bottom, 1.0232 " 18

Number of salinometer, 7450

Barometer reading, 29.81

State of sky, Cloudy

Direction of wind, West ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain, U. S. N.

Name and position of observer,
Vernon L. West

NOTES RELATING TO STATION NO. P 58

Le bank of river
Many fine beaver skulls
Many canoes
Le Big small spruce
Many wigwams

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7531

Date, July 31, 1903

Time of day, 3.45 P M. of tide, 3/4 flood

Locality, Tongue Sound, Alaska

Exact position, Sanborn Cove bears N. ½ W.
Ketchikan Point bears N. E. ¾ N.

Depth, 8½ fathoms

Nature of bottom, Sandy

Dredging instrument used, Rake dredge

Direction of drift, E. N. E. ; distance, ½ mile.

Temperature of air, 68 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 67 "

Density at surface, 1.0230 temp., 12.5° C.

" at depth of fathoms, "

" at bottom, 1.0234 " 12.5°

Number of salinometer, 7450

Barometer reading, 29.87

State of sky, Cloudy

Direction of wind, West ; force, 2

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James E. Smith
Boatswain, U. S. N.

Name and position of observer,
Tarleton L. Hoxt

NOTES RELATING TO STATION NO. 2031

Heavy [illegible] with the cliff of
deposition forecasts + the [illegible]
to settle long succession of [illegible]

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7532

Date, August 3 1893

Time of day, 2.07 P.M. ; of tide, Low Water

Locality, Vineyard Sound, Mass.

Exact position, West chop bears E. S. E.
Sunken Rock bears W. ½ N. ½ N.

Depth, 11 fathoms

Nature of bottom, Sand & Rock

Dredging instrument used, Rake Dredge

Direction of drift, East ; distance, ½ mi.

Temperature of air, 73 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 70 "

Density at surface, 1.0222 temp., 20.5 Cels.

" at depth of fathoms, "

" at bottom, 1.0220 "

Number of salinometer, 7450

Barometer reading, 30.22

State of sky, Partly cloudy

Direction of wind, S. E. ; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain U. S. N.

Name and position of observer,
James E. Hunt

NOTES RELATING TO STATION NO. 75°52

Ascidians (3 species)
Hydroids (2 species)
Crabs (2 species)
Hermit crabs (2 species)
Star fishes (2 species)
Brittle star (1 species)
Many copepods
Sea anemone
Several species worms
Bryozoa (4 species)
Sea cucumbers.
Sulphur sponge (Stimulas)
8 species bivalve mollusks
5 species univalve mollusks
Coral
Sea spider.

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 75-33

Date, August 3 1903

Time of day, 8.20 A.M.; of tide, ½ Flood

Locality, Vineyard Sound, Mass

Exact position, Lafayette Corkum's Red Wreck Chf. Mon 6 N.S. ½ E.

Depth, 10 fathoms

Nature of bottom, Sandy

Dredging instrument used, Pipe Dredge

Direction of drift, East ; distance, ½ mi.

Temperature of air, 72 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 68½ "

Density at surface, 1.0222 temp., 20.5 Cels.

" at depth of fathoms, "

" at bottom, 1.0220 "

Number of salinometer, 7450

Barometer reading, 30.22

State of sky, Partly clear

Direction of wind, S E. ; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force.

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Lt. U.S. Revenue Marine, U.S.N.

Name and position of observer, James E. Heck

NOTES RELATING TO STATION NO. 2523

Few sea-urchins.
Sand spurs worms
Many sand dollars.
Small pale sulfur sponge
2 species bivalve mollusks
3 species univalve mollusks
1 species of snail
2 sand eels
1 isopod

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 25-34

Date, August 3, 1903

Time of day, 3:05 P.M.; of tide, ¼ Flood

Locality, Vineyard Sound, Race

Exact position, Lat. as in Sta. No. 8 & 9. West Chop bears S. 25°, Nobska Point bears N. E.

Depth, 10¼ fathoms

Nature of bottom, Rocky

Dredging instrument used, Rake dredge

Direction of drift, East ; distance, ½ mi.

Temperature of air, 73 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 68½ "

Density at surface, 1.0227 temp., 82 Cent.

" at depth of fathoms, "

" at bottom, 1.0223 "

Number of salinometer, 7453

Barometer reading, 3022

State of sky, Partly Cloudy

Direction of wind, S. E. ; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U. S. N.

Name and position of observer, Vernon L. Worth.

NOTES RELATING TO STATION NO. 7535

1 species ascidians
2 species Hydroza
1 species crab
3 species Hermit crabs
2 species star fish
Many sea urchins
Several species worms
Several species bryozoa
4 species tubular mollusks
5 species univalve mollusks
Few pieces coral

643

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7595

Date, August 3, 1893

Time of day, 3.15 P.M.; of tide, ¼ Flood

Locality, Vineyard Sound, Mass.

Exact position, Robbins Point bears N. N. E.
Tarpaulin Cove bears N. 2½ W.

Depth, 10 fathoms

Nature of bottom, Gravel & Sand

Dredging instrument used, Rake Dredge

Direction of drift, N. E. ; distance, ⅛ mi.

Temperature of air, 73 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 67 "

Density at surface, 1.0227 temp., 19.5

" at depth of fathoms, "

" at bottom, 1.0222 "

Number of salinometer, 7450

Barometer reading, 3020

State of sky, Cloudy

Direction of wind, S. E. ; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force.

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain, U. S. N.

Name and position of observer,
Vernon L. Kellogg.

NOTES RELATING TO STATION NO. 53

2 species ascidians
1 species Hydroid
2 species crabs
2 species hermit crabs
2 species star fish
few sea urchins
few species worms
1 species bryozoa
1 sand dollar
10 species tinabe mollusks
5 species univalve mollusks
few pieces coral
few tunicates

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7536

Date, August 3, 1903

Time of day, 7.00 P.M.; of tide, ½ Flood

Locality, Vineyard Sound, Mass.

Exact position, Tarpaulin Cove Range N. ¼ W. ½ W.
Naushon Point Range N. ¼ E. ½ E.

Depth, 5½ fathoms

Nature of bottom, Sandy

Dredging instrument used, Naushon Dredge

Direction of drift, N. N. E.; distance, ½ mile

Temperature of air, 74 therm. No., "

" of surface water, " "

" at depth of fathoms, " "

" at bottom, 67 " "

Density at surface, 1.0225 temp., 19 Cent.

" at depth of fathoms, " "

" at bottom, 1.0226 " "

Number of salinometer, 2750

Barometer reading, 30.20

State of sky, Partly clear

Direction of wind, S. E.; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James E. Moser
Boatswain, U. S. N.

Name and position of observer,

Pierce C. Wood

NOTES RELATING TO STATION NO. 7536

2 species asterinas
3 species hermit crabs
2 species star fish
1 brittle star
1 rare sea urchin
Several species worms
1 species tiny octopus
1 sand dollar
Several pieces sulfur sponge
7 species tropic mollusks
5 species minature mollusks
1 chitons
1 sea snail (fish)
2 sculpin.

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7537

Date, August 7 1923

Time of day. 1.45 P.M.: of tide, ½ ebb

Locality, Vineyard Sound Mass.

Exact position, Tarpaulin Cove bears N. x W ½ W

West Chop bears E x S. ½ S.

Depth, 15 fathoms

Nature of bottom, Coarse gravel

Dredging instrument used, Oyster dredge

Direction of drift, S.W. ; distance, ⅛ mi.

Temperature of air. 65° therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 67 "

Density at surface. 1.0230 temp., 67°

" at depth of fathoms, "

" at bottom, 1.0225 " "

Number of salinometer, 7450

Barometer reading. 29.67

State of sky, Partly cloudy

Direction of wind, S W. : force. 3

Rain,

Direction of surface current, : force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatswain U.S.N.

Name and position of observer,

James E. Hoyt.

NOTES RELATING TO STATION NO. 2[illegible]

2 species meridians
2 species hydroa
3 species crabs
2 species hermit crabs
2 species star fish.
Many ova medusae.
Several species asterias
Several species hydroa
~~Sand dollar~~
few pieces sulphur sponge
7 species brachiate mollusks.
2 species univalve mollusks
Many pieces coral
1 species shrimps
1 species tornacles
1 species. clotrus

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7538

Date, August 7, 1903

Time of day, 2 30 P.M.; of tide, 1/2 ebb

Locality, Vineyard Sound, Mass.

Exact position, Entrance Cuttyhunk Pond, West
of Gosnold & Est. Middle Pt. from A N C 346

Depth, 10 fathoms

Nature of bottom, Stone

Dredging instrument used, Oyster dredge

Direction of drift, S W. ; distance, 1/8 mile.

Temperature of air, 65° therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 70 "

Density at surface, 1.0223 temp., 20

" at depth of fathoms, "

" at bottom, 1.0222 "

Number of salinometer, 7450

Barometer reading, 29.64

State of sky, Clear

Direction of wind, S W. ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, [illegible]
Boatswain, U. S. N.

Name and position of observer,
Simon E. Wood.

NOTES RELATING TO STATION NO. 1138

2 species ophiuroids
2 species hydroids
2 species crabs
3 species hermit crabs
2 species star fish.
Many sea urchins
Several species worms
Several species bryozoa
1 sand dollar
Many pieces sulfur sponge
5 species univalve mollusks
3 species univalve mollusks
Many pieces coral
1 sea spider.
Several barnacles
Several shrimp

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 7539

Date, August 7, 1903

Time of day, 3.55 P.M.; of tide, 3/4 ebb.

Locality, Vineyard Sound, Mass.

Exact position, Katama Cove W. 3/4 N.

Notaska Point Lewis N. E. 1/4 E.

Depth, 13 fathoms

Nature of bottom, Stony

Dredging instrument used, Oyster dredge

Direction of drift, S. W.; distance, 1/8 mi.

Temperature of air, 65° therm. No.,

" of surface water, " "

" at depth of fathoms, " "

" at bottom, 69 " "

Density at surface, 1.0234 temp., 20 Celsius

" at depth of fathoms, "

" at bottom, 1.0223 "

Number of salinometer, 7450

Barometer reading, 29.63

State of sky, Clear

Direction of wind, S. W.; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatswain, U. S. N.

Name and position of observer,

Lewis L. Mowbray

NOTES RELATING TO STATION NO. 2537

3 species sea urchins
1 species hydroid
2 species crabs
3 species hermit crabs
2 species star fish
Several sea worms
Several species nemas
Several species bryozoa
Several shells of Lamellibranchs
6 species bivalve mollusks
5 species univalve mollusks
Several species coral
2 sea spiders

643

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 75-40

Date, August 7 1903

Time of day, 3:20 P.M.; of tide, 3/4 ebb.

Locality, Vineyard Sound, Mass

Exact position, Nobska Pt. bears N. E. 3/4 N.
Tarpaulin Cove bears E. x S. 1/2 S.

Depth, 5 fathoms

Nature of bottom, Sand & dead shells

Dredging instrument used, Oyster dredge

Direction of drift, S. W. ; distance, 1/2 mile

Temperature of air, 67 ; therm. No.,

" of surface water, ; "

" at depth of fathoms, ; "

" at bottom, 69 1/2 ; " 1 Casun

Density at surface, 1.0222 temp., 19.5°

" at depth of fathoms, ; "

" at bottom, 1.0222 ; "

Number of salinometer, 7750

Barometer reading, 29.63

State of sky, Clear

Direction of wind, S W. ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain U. S. F. C.

Name and position of observer,
Fenner C. West.

NOTES RELATING TO STATION NO. 350

4 species ascidians
3 species hydroa
2 species Star fish
Few ave molluscs
Few species worms
Few species bryozoa
Several pieces sulfite sponge
1 species minute mollusks
Several pieces coral
1 chiton

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7541

Date, August 7 1913

Time of day, 3.40 P.M.; of tide, 3/4 ebb.

Locality, Piney and Sowdy Shoals.

Exact position, Robbins Pt. bears N. E ½ E.
Jarboe Cove bears E. S. E.

Depth, 13 fathoms

Nature of bottom, Sand & gravel

Dredging instrument used, Oyster dredge

Direction of drift, S. W. ; distance, ½ mile

Temperature of air, 67 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 69 "

Density at surface, 1.0222 temp., 80

" at depth of fathoms, "

" at bottom, 1.0222 "

Number of salinometer, 7450

Barometer reading, 2963

State of sky, Clear

Direction of wind, S. W. ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James E. Smith
Lieutenant, U. S. N.

Name and position of observer, James E. Neff

NOTES RELATING TO STATION NO. 22

1 species ascidian
2 species hydrozoa
1 species crab
Few sea urchins
Few species worms
Few fine sulfur sponge
2 species minute mollusca.
2 species minute nudibranchs.
6 card fish.
1 small sand dab.

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7542

Date, August 7, 1883

Time of day, 4 or 8 P.M.; of tide, 3/4 ebb.

Locality, Pinyard Sound, Mosquito

Exact position, Wahoo Pt. bears N. N. E. 1/2 E.

Tarpaulin Cove bears N. W. 1/2 W.

Depth, 7 fathoms

Nature of bottom, Sandy

Dredging instrument used, 7 ft. beam Tanner

Direction of drift, S. W.; distance, 1/8 mi.

| | | |
|---|---|---|
| Temperature of air, | 67 | therm. No., |
| " of surface water, | | " |
| " at depth of fathoms, | | " |
| " at bottom, | 69 | " |
| Density at surface, | 1.0234 | temp., 19.5 |
| " at depth of fathoms, | | " |
| " at bottom, | 1.0223 | " |

Number of salinometer, 7450

Barometer reading, 29.63

State of sky, Clear

Direction of wind, S. W.; force, 3

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. [illegible]
Lieutenant, U.S.N.

Name and position of observer,

Vernon L. Kellogg

NOTES RELATING TO STATION NO. 2136

2 species actinians
1 species hydroid
1 species ascidian
2 species heart urchin
2 species star fish
Few ophiuras
Few species worms
Few species hydroid
Few sand dollars (dead)
Many pieces sulphur sponge
5 species brittle urchins
5 species urchin urchins
Few tunicates
2 chiton.
Few shrimp.

# RECORD OF DREDGING.

## TEMPERATURE AND DENSITY.

Station No. 7543

Date, August 11, 1903

Time of day, 2.10 P.M. ; of tide. 3/4 ebb

Locality, Vineyard Sound, Mass.

Exact position, Gay Head bears S.W. ½ S.
Nobska Lt. bears E. ½ N.

Depth, 12 fathoms

Nature of bottom, Coarse gravel

Dredging instrument used, Oyster dredge

Direction of drift, S.E. ; distance, ⅛ mi.

Temperature of air, 73 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 67½ "

Density at surface, 1.0239 temp., 79

" at depth of fathoms, "

" at bottom, 1.0220 "

Number of salinometer, 7450

Barometer reading. 2985

State of sky, Cloudy

Direction of wind, S.S.W. ; force, 1

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain, U.S.N.

Name and position of observer,

NOTES RELATING TO STATION NO. 2[illegible]

643

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 75-44

Date, August 11, 1903

Time of day, 2:25 P.M.; of tide, 3/4 ebb

Locality, Vineyard Sound, Mass.

Exact position, Tarpaulin Cove bears W. 3/4 N.
Robeka Lt. N. E. x E. 1/2 E.

Depth, 10½ fathoms

Nature of bottom, Coarse gravel

Dredging instrument used, 7 ft. beam trawl
Oyster dredge &

Direction of drift, S. E.; distance, 1/6 mi.

Temperature of air, 70 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 67.5 "

Density at surface, 1.0231, temp., 19 at

" at depth of fathoms, "

" at bottom, 1.0223 "

Number of salinometer, 7450

Barometer reading, 2978

State of sky, Cloudy

Direction of wind, S. S. W.; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain, U. S. N.

Name and position of observer,
Vernon E. West.

NOTES RELATING TO STATION NO. 25 2X

Few yellow sponges
2 species hydroza
Dead pieces coral
1 specie sea-anemones
1 specie star fish
Several dead sand dollars
4 species annelids
Several species bryozoa
3 specie crabs
2 specie hermit crabs
Few barnacles
7 species bivalve molluscs
7 species univalve molluscs
Few chitons
Several batches squid eggs
3 species ascidians

# RECORD OF DREDGING,

## TEMPERATURE AND DENSITY.

Station No. 75-45

Date, August 11, 1903

Time of day, 2.40 P.M.; of tide, 3/4 ebb.

Locality, Vineyard Sound, Mass.

Exact position, Tarpaulin Cove bears N.N.W. 3/4 W.
Noteka bears N.E. 1/2 E.

Depth, 10 1/4 fathoms

Nature of bottom, Stones and coarse gravel

Dredging instrument used, Oyster dredge

Direction of drift, S.S.W. ; distance, 1/4 mi.

Temperature of air, 70 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, 67 1/2 "

Density at surface, 1.1292 temp., 18.5

" at depth of fathoms, "

" at bottom, 1.0226 "

Number of salinometer, 7450

Barometer reading, 29.78

State of sky, Cloudy

Direction of wind, S.S.W. ; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain, U.S.N.

Name and position of observer,
Vernon C. Nash.

NOTES RELATING TO STATION NO. 2034

Many pieces coral
2 species star fish
Many sea-urchins (2 species)
1 Sand dollar
3 species annelids
Several species bryozoa
4 species crabs
1 species hermit crabs
4 species minute molluscs
3 species minute molluscs
Few chitons.
1 species ascidians
1 sand eel
Eggs of skate.